- (b) Alterations and modifications, such as re-engining, re-powering, upgrading of the main propulsion control system, or replacing extensive amounts of cabling, must comply with the regulations in this subchapter.
- (c) Conversions specified in 46 U.S.C. 2101(14a), such as the addition of a midbody or a change in the service of the vessel, are handled on a case-by-case basis by the Commanding Officer, Marine Safety Center.

[CGD 94–108, 61 FR 28271, June 4, 1996, as amended at 62 FR 23906, May 1, 1997]

§110.01-4 Right of appeal.

Any person directly affected by a decision or action taken under this subchapter, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88-033, 54 FR 50380, Dec. 6, 1989]

Subpart 110.10—Reference Specifications, Standards, and Codes

$\S 110.10-1$ Incorporation by reference.

(a) Certain material is incorporated by reference into this subchapter with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish notice of change in the FEDERAL REG-ISTER and the material must be available to the public. The word "should," when used in material incorporated by reference, is to be construed the same as the words "must" or "shall" for the purposes of this subchapter. All approved material is available for inspection at the U.S. Coast Guard, Office of Design and Engineering Standards (CG-ENG), 2703 Martin Luther King Jr. Avenue SE., Stop 7126, Washington, DC 20593-7126, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to http:// www.archives.gov/federal register/ code of federal regulations/ ibr locations.html.

- (b) American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Drive, Houston, TX 77060, 281–877–5800, http://www.eagle.org.
- (1) Rules for Building and Classing Steel Vessels, Part 4 Vessel Systems and Machinery, 2003 ("ABS Steel Vessel Rules"), IBR approved for §\$110.15–1, 111.01–9, 111.12–3, 111.12–5, 111.12–7, 111.33–11, 111.35–1, 111.70–1, 111.105–31, 111.105–39, 111.105–40 and 113.05–7.
- (2) Rules for Building and Classing Mobile Offshore Drilling Units, Part 4 Machinery and Systems, 2001 ("ABS MODU Rules"), IBR approved for §§ 111.12–1, 111.12–3, 111.12–5, 111.12–7, 111.33–11, 111.35–1 and 111.70–1.
- (c) American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036, 212–642–4900, http://www.ansi.org/.
- (1) ANSI/IEEE C37.12–1991—American National Standard for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis-Specifications Guide, 1991 ("ANSI/IEEE C37.12"), IBR approved for §111.54–1.
- (2) ANSI/IEEE C37.27-1987 (IEEE Std 331)—Application Guide for Low-Voltage AC Nonintegrally Fused Power Circuitbreakers (Using Separately Mounted Current-Limiting Fuses), 1987 ("ANSI/IEEE C37.27"), IBR approved for §111.54-1.
- (3) ANSI/ISA 60079–18—Electrical Apparatus for Use in Class I, Zone 1 Hazardous (Classified) Locations: Type of Protection—Encapsulation "m", approved July 31, 2009 ("ANSI/ISA 60079–18"), IBR approved for §111.106–3(d).
- (d) American Petroleum Institute (API), Order Desk, 1220 L Street NW., Washington, DC 20005–4070, 202–682–8000, http://www.api.org.
- (1) API RP 500—Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2, Second Edition, November 1997, reaffirmed in 2002 ('API RP 500'), IBR approved for §§111.106–7(a) and 111.106–13(b).
- (2) API RP 505—Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1, and Zone 2, First Edition, approved January 7, 1998 (dated November 1997), reaffirmed 2002 ("API RP

§ 110.10-1

- 505''), IBR approved for \$111.106-7(a) and 111.106-13(b).
- (e) American Society of Mechanical Engineers (ASME) International, Three Park Avenue, New York, NY 10016-5990, 800-843-2763, http://www.asme.org/.
- (1) ASME A17.1–2000—Part 2 Electric Elevators, 2000 ("ASME A17.1"), IBR approved for §111.91–1.
 - (2) [Reserved]
- (f) ASTM International (formerly American Society for Testing and Materials), 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, 610–832–9500, http://www.astm.org.
- (1) ASTM B 117-97—Standard Practice for Operating Salt Spray (Fog) Apparatus ("ASTM B 117"), IBR approved for §110.15-1.
- (2) ASTM F2876-10—Standard Practice for Thermal Rating and Installation of Internal Combustion Engine Packages for use in Hazardous Locations in Marine Applications, approved November 1, 2010 ("ASTM F2876-10"), IBR approved for §111.106-3(h).
- (g) Canadian Standards Association (CSA), 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6, Canada, 800–463–6727, http://www.csa.ca/.
- (1) C22.2 No. 30–M1986—Explosion-Proof Enclosures for Use in Class I Hazardous Locations, Reaffirmed 2007 ("CAN/CSA C22.2 No. 30–M1986"), IBR approved for §111.106–3(b).
- (2) C22.2 No. 213–M1987—Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations, Reaffirmed 2008 ("CAN/CSA C22.2 No. 213–M1987"), IBR approved for §111.106–3(b).
- (3) CAN/CSA-C22.2 No. 0-M91—General Requirements—Canadian Electrical Code, Part II, Reaffirmed 2006 ("CAN/CSA C22.2 No. 0-M91"), IBR approved for \$111.106-3(b).
- (4) CAN/CSA-C22.2 No. 157-92—Intrinsically Safe and Non-incendive Equipment for Use in Hazardous Locations, Reaffirmed 2006 ("CAN/CSA C22.2 No. 157-92"), IBR approved for §111.106-3(b).
- (h) DLA Document Services, Department of Defense, Single Stock Point, 700 Robbins Avenue, Philadelphia, PA 19111, 215-697-6396, http://www.assistdocs.com.
- (1) MIL-C-24640A—Military Specification Cables, Light Weight, Electric, Low Smoke, for Shipboard Use, Gen-

- eral Specification for (1995) Supplement 1, June 26, 1995 ("NPFC MIL-C-24640A"), IBR approved for §§111.60-1 and 111.60-3.
- (2) MIL-C-24643A—Military Specification Cables and Cords, Electric, Low Smoke, for Shipboard Use, General Specification for (1996), Amendment 2, March 13, 1996 ("MIL-C-24643A"), IBR approved for §§ 111.60–1 and 111.60–3.
- (3) MIL-DTL-24640C with Supplement 1—Detail Specification Cables, Lightweight, Low Smoke, Electric, for Shipboard Use, General Specification for, November 18, 2011 ("MIL-DTL-24640C"), IBR approved for §111.106-5(a).
- (4) MIL-DTL-24643C with Supplement 1A—Detail Specification Cables, Electric, Low Smoke Halogen-Free, for Shipboard Use, General Specification for, December 13, 2011 (dated October 1, 2009) ("MIL-DTL-24643C"), IBR approved for §111.106-5(a).
- (5) MIL-W-76D—Military Specification Wire and Cable, Hook-Up, Electrical, Insulated, General Specification for (2003) Amendment 1–2003, February 6, 2003 ("NPFC MIL-W-76D"), IBR approved for §111.60–11.
- (i) FM Approvals, P.O. Box 9102, Norwood, MA 02062, 781–440–8000, http://www.fmglobal.com:
- (1) Class Number 3600—Approval Standard for Electric Equipment for use in Hazardous (Classified) Locations General Requirements, November 1998 ("FM Approvals Class Number 3600"), IBR approved for §111.106–3(b).
- (2) Class Number 3610—Approval Standard for Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations, January 2010 ("FM Approvals Class Number 3610"), IBR approved for §111.106–3(b).
- (3) Class Number 3611—Approval Standard for Non-incendive Electrical Equipment for Use in Class I and II, Division 2, and Class III, Divisions 1 and 2, Hazardous (Classified) Locations, December 2004 ("FM Approvals Class Number 3611"), IBR approved for § 111.106–3(b).
- (4) Class Number 3615—Approval Standard for Explosionproof Electrical Equipment General Requirements, August 2006 ("FM Approvals Class Number 3615"), IBR approved for §111.106—3(b).

- (5) Class Number 3620—Approval Standard for Purged and Pressurized Electrical Equipment for Hazardous (Classified) Locations, August 2000 ("FM Approvals Class Number 3620"), IBR approved for §111.106–3(b).
- (j) Institute of Electrical and Electronic Engineers (IEEE), IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854, 732–981–0060, http://www.ieee.org.
- (1) IEEE Std C37.04-1999—IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers, 1999 ("IEEE C37.04"), IBR approved for §111.54-1.
- (2) IEEE Std C37.010-1999—IEEE Application Guide for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis, 1999 ("IEEE C37.010"), IBR approved for §111.54-1.
- (3) IEEE Std C37.13-1990—IEEE Standard for Low-Voltage AC Power Circuit Breakers Used in Enclosures, October 22, 1990 ("IEEE C37.13"), IBR approved for §111.54-1.
- (4) IEEE Std C37.14–2002—IEEE Standard for Low-Voltage DC Power Circuit Breakers Used in Enclosures, April 25, 2003 ("IEEE C37.14"), IBR approved for §111.54–1.
- (5) IEEE Std 45–1998—IEEE Recommended Practice for Electric Installations on Shipboard, October 19, 1998 ("IEEE 45–1998"), IBR approved for §§ 111.30–19, 111.105–3, 111.105–31 and 111.105–41.
- (6) IEEE Std 45–2002—IEEE Recommended Practice for Electrical Installations On Shipboard, October 11, 2002 ("IEEE 45–2002"), IBR approved for $\S11.05-7, 111.15-2, 111.30-1, 111.30-5, 111.33-3, 111.33-5, 111.40-1, 111.60-1, 111.60-3, 111.60-5, 111.60-11, 111.60-13, 111.60-19, 111.60-21, 111.60-23, 111.75-5 and 113.65-5.$
- (7) IEEE 100—The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition, 2000 ("IEEE 100"), IBR approved for §110.15–1.
- (8) IEEE Std 1202-1991—IEEE Standard for Flame Testing of Cables for Use in Cable Tray in Industrial and Commercial Occupancies, 1991 ("IEEE 1202"), IBR approved for §§ 111.60–6 and 111.107–1.
- (9) IEEE Std 1580-2001—IEEE Recommended Practice for Marine Cable for Use on Shipboard and Fixed or Floating Platforms, December 17, 2001

- ("IEEE 1580"), IBR approved for \$111.60-1, 111.60-2, 111.60-3 and 111.106-5(a).
- (k) International Electrotechnical Commission (IEC), 3 Rue de Varembe, Geneva, Switzerland, +41 22 919 02 11, http://www.iec.ch/.
- (1) IEC 60068-2-52—Environmental Testing Part 2: Tests—Test Kb: Salt Mist, Cyclic (Sodium Chloride Solution), Second Edition, 1996 ("IEC 60068-2-52"), IBR approved for §110.15-1.
- (2) IEC 60079-0—Electrical apparatus for Explosive Gas Atmospheres—Part 0: General Requirements, Edition 3.1, 2000 ("IEC 60079-0"), IBR approved for §§ 111.105-1, 111.105-3, 111.105-5, 111.105-7, and 111.105-17.
- (3) IEC 60079-1—Electrical Apparatus for Explosive Gas Atmospheres—Part 1: Flameproof Enclosures "d" including corr.1, Fourth Edition, 2001 ("IEC 60079-1"), IBR approved for §§ 111.105-1, 111.105-3, 111.105-5, 111.105-7, 111.105-9, and 111.105-17.
- (4) IEC 60079–1:2007—Explosive Atmospheres—Part 1: Equipment Protection by Flameproof Enclosures "d", Sixth Edition, 2007–04, IBR approved for §111.106–3(b).
- (5) IEC 60079–2—Electrical Apparatus for Explosive Gas Atmospheres—Part 2: Pressurized Enclosures "p", Fourth Edition, 2001 ("IEC 60079–2"), IBR approved for §§ 111.105–1, 111.105–3, 111.105–5, 111.105–7 and 111.105–17.
- (6) IEC 60079–2:2007—Explosive atmospheres—Part 2: Equipment protection by pressurized enclosures "p", Fifth Edition, 2007–02, IBR approved for §111.106–3(b).
- (7) IEC 60079-5—Electrical Apparatus for Explosive Gas Atmospheres—Part 5: Powder Filling "q", Second Edition, 1997 ("IEC 60079-5"), IBR approved for §§ 111.105-1, 111.105-3, 111.105-5, 111.105-7, 111.105-15 and 111.105-17.
- (8) IEC 60079-5:2007—Explosive atmospheres—Part 5: Equipment protection by powder filling "q", Third edition, 2007-03, IBR approved for §111.106-3(b).
- (9) IEC 60079-6—Electrical Apparatus for Explosive Gas Atmospheres—Part 6: Oil Immersion "o", Second Edition, 1995 ("IEC 60079-6"), IBR approved for §§ 111.105-1, 111.105-3, 111.105-5, 111.105-7, 111.105-15 and 111.105-17.

§ 110.10-1

- (10) IEC 60079-6:2007—Explosive atmospheres—Part 6: Equipment protection by oil immersion "o", Third edition, 2007-03, IBR approved for §111.106-3(b).
- (11) IEC 60079-7—Electrical Apparatus for Explosive Gas Atmospheres—Part 7: Increased Safety "e", Third Edition, 2001 ("IEC 60079-7"), IBR approved for §§ 111.105-1, 111.105-3, 111.105-5, 111.105-7, 111.105-15 and 111.105-17.
- (12) IEC 60079–7:2006—Explosive atmospheres—Part 7: Equipment protection by increased safety "e", Fourth edition, 2006–07, IBR approved for §111.106–3(b).
- (13) IEC 60079-11—Electrical Apparatus for Explosive Gas Atmospheres—Part 11: Intrinsic Safety "i", Fourth Edition, 1999 ("IEC 60079-11"), IBR approved for §§ 111.105-1, 111.105-3, 111.105-5, 111.105-7, 111.105-11 and 111.105-17.
- (14) IEC 60079–11:2006—Explosive atmospheres—Part 11: Equipment protection by intrinsic safety "i", Fifth edition, 2006–07, IBR approved for §111.106–3(b).
- (15) IEC 60079–13:2010—Explosive atmospheres—Part 13: Equipment protection by pressurized room "p", Edition 1.0, 2010–10, IBR approved for §111.106–3(b).
- (16) IEC 60079–15—Electrical Apparatus for Explosive Gas Atmospheres—Part 15: Type of Protection "n", Second Edition, 2001 ("IEC 60079–15"), IBR approved for §§111.105–1, 111.105–3, 111.105–5, 111.105–7, 111.105–15 and
- (17) IEC 60079–15:2010—Explosive atmospheres—Part 15: Equipment protection by type of protection "n", Edition 4.0, 2010–01, IBR approved for §111.106–3(b).
- (18) IEC 60079–18 Electrical Apparatus for Explosive Gas Atmospheres—Part 18: Encapsulation "m", First Edition, 1992 ("IEC 79–18"), IBR approved for §§, 111.105–1, 111.105–3, 111.105–5, 111.105–7, 111.105–15 and 111.105–17.
- (19) IEC 60079–18:2009—Explosive atmospheres—Part 18: Equipment protection by encapsulation "m", Edition 3.0, 2009–05, IBR approved for §111.106–3(b) and (d).
- $\begin{array}{cccc} (20) & IEC & 60079-25:2010-\text{Explosive} \\ \text{atmospheres--Part} & 25: & Intrinsically \\ \text{safe} & \text{electrical systems, Edition 2.0,} \\ 2010-02, & IBR & \text{approved for } \$111.106-3(b). \end{array}$

- (21) IEC 60092-101—Electrical Installation in Ships, Part 101: Definitions and General Requirements, Edition 4.1, 2002 ("IEC 60092-101"), IBR approved for \$\$110.15-1 and 111.81-1.
- (22) IEC 60092-201—Electrical Installation in Ships, Part 201: System Design—General, Fourth Edition, 1994 ("IEC 92-201"), IBR approved for §§ 111.70-3 and 111.81-1.
- (23) IEC 60092-202—Amendment 1 Electrical Installation in Ships, Part 202: System Design—Protection, 1996 ("IEC 92-202"), IBR approved for §§111.12-7, 111.50-3, 111.53-1 and 111.54-1.
- (24) IEC 60092–301—Amendment 2 Electrical Installation in Ships, Part 301: Equipment—Generators and Motors, 1995 ("IEC 92–301"), IBR approved for §§ 111.12–7, 111.25–5 and 111.70–1.
- (25) IEC 60092–302—Electrical Installation in Ships, Part 302: Low-Voltage Switchgear and Control Gear Assemblies, Fourth Edition, 1997 ("IEC 60092–302"), IBR approved for §§111.30–1, 111.30–5 and 111.30–19.
- (26) IEC 60092-303—Electrical Installation in Ships, Part 303: Equipment—Transformers for Power and Lighting, Third Edition, 1980 ("IEC 92-303"), IBR approved for §111.20-15.
- (27) IEC 60092–304—Amendment 1 Electrical Installation in Ships, Part 304: Equipment-Semiconductor Convertors, 1995 ("IEC 92–304"), IBR approved for §§ 111.33–3 and 111.33–5.
- (28) IEC 60092–306—Electrical Installation in Ships, Part 306: Equipment-Luminaries and accessories, Third Edition, 1980 ("IEC 92–306"), IBR approved for §§ 111.75–20 and 111.81–1.
- (29) IEC 60092–350:2008—Electrical installations in ships—Part 350: General construction and test methods of power, control and instrumentation cables for shipboard and offshore applications, Edition 3.0, 2008–02, IBR approved for §111.106–5(a).
- (30) IEC 60092-352—Electrical Installation in Ships—Choice and Installation of Cables for Low-Voltage Power Systems, Second Edition, 1997 ("IEC 60092-352"), IBR approved for §§111.60-3, 111.60-5 and 111.81-1.
- (31) IEC 60092-353—Electrical Installations in Ships—Part 353: Single and Multicore Non-Radial Field Power Cables with Extruded Solid Insulation for Rated Voltages 1kV and 3kV, Second

Coast Guard, DHS § 110.10–1

Edition, 1995 (''IEC 60092–353''), IBR approved for $\S111.60-1$, 111.60-3 and 111.60-5

- (32) IEC 60092-353:2011—Electrical installations in ships—Part 353: Power cables for rated voltages 1 kV and 3 kV, Edition 3.0, 2011-08, IBR approved for §111.106-5(a).
- (33) IEC 60092-401—Electrical Installations in Ships, Part 401: Installation and Test of completed Installation with amendment 1 (1987) and amendment 2 (1997), Third Edition, 1980, ("IEC 60092-401"), IBR approved for §§111.05-9 and 111.81-1.
- (34) IEC 60092-502—Electrical installations in ships—Part 502: Tankers—Special features—Fifth edition, 1999-02 ("IEC 60092-502"), IBR approved for §§111.81-1, 111.105-31, 111.106-3(b), 111.106-5(c), and 111.106-15(a).
- (35) IEC 60092-503—Electrical installations in ships, Part 503: Special features: A.C. supply systems with voltages in the range of above 1kV up to and including 11kV, First Edition, 1975 ("IEC 60092-503"), IBR approved for §111.30-5.
- (36) IEC 60331-11—Tests for electric cables under fire conditions—Circuit integrity—Part 11: Apparatus—Fire alone at a flame temperature of at least 750 °C, First Edition, 1999 ("IEC 60331-11"), IBR approved for §113.30-25.
- (37) IEC 60331–21—Tests for Electric Cables Under Fire Conditions—Circuit Integrity—Part 21: Procedures and Requirements—Cables of Rated Voltage up to and Including 0.6/1.0kV, First Edition, 1999 ("IEC 60331–21"), IBR approved for §113.30–25.
- (38) IEC 60332-1—Tests on Electric Cables Under Fire Conditions, Part 1: Test on a Single Vertical Insulated Wire or Cable, Third Edition, 1993 ("IEC 60332-1"), IBR approved for §111.30-19.
- (39) IEC 60332-3-22—Tests on Electric Cables Under Fire Conditions—Part 3-22: Test for Vertical Flame Spread of Vertically-Mounted Bunched Wires or Cables—Category A, First Edition, 2000 ("IEC 60332-3-22"), IBR approved for \$\\$111.60-1, 111.60-2, 111.60-6 and 111.107-1
- (40) IEC 60529—Degrees of Protection Provided by Enclosures (IP Code), Edition 2.1, 2001 ("IEC 60529"), IBR approved for §§110.15-1, 111.01-9, 113.10-7,

113.20–3, 113.25–11, 113.30–25, 113.37–10, 113.40–10 and 113.50–5.

- (41) IEC 60533—Electrical and Electronic Installations in Ships—Electromagnetic Compatibility, Second Edition, (1999), ("IEC 60533"), IBR approved for §113.05–7.
- (42) IEC 60947-2—Low-Voltage Switchgear and Controlgear Part 2: Circuit-Breakers, Third Edition, 2003 ("IEC 60947-2"), IBR approved for § 111.54–1.
- (43) IEC 61363-1—Electrical Installations of Ships and Mobile and Fixed Offshore Units—Part 1: Procedures for Calculating Short-Circuit Currents in Three-Phase a.c., First Edition, 1998 ("IEC 61363-1"), IBR approved for §111.52-5.
- (44) IEC 62271-100—High-voltage switchgear and controlgear—part 100: High-voltage alternating current circuitbreakers, Edition 1.1, 2003 ("IEC 62271-100"), IBR approved for §111.54-1.
- (1) International Maritime Organization (IMO), Publications Section, 4 Albert Embankment, London SE1 7SR, United Kingdom, +44 (0)20 7735 7611, http://www.imo.org.
- (1) International Convention for the Safety of Life at Sea (SOLAS), Consolidated Text of the International Convention for the Safety of Life at Sea, 1974, and its Protocol of 1988: Article, Annexes and Certificates. (Incorporating all Amendments in Effect from January 2001), ("IMO SOLAS 74"), IBR approved for §§111.99–5, 111.105–31, 112.15–1 and 113.25–6.
 - (2) [Reserved]
- (m) International Society of Automation (ISA), 67 Alexander Drive, P.O. Box 12277, Research Triangle Park, NC 27709, 919–549–8411, http://www.isa.org.
- (1) RP 12.6—Wiring Practices for Hazardous (Classified) Locations Instrumentation Part I: Intrinsic Safety, 1995 ("ISA RP 12.6"), IBR approved for §111.105–11.
 - (2) [Reserved]
- (n) Lloyd's Register, 71 Fenchurch Street, London EC3M 4BS, +44 (0)20 7709 9166, http://www.lr.org.
- (1) Type Approval System-Test Specification Number 1 (2002), IBR approved for $\S 113.05-7$.
 - (2) [Reserved]
- (o) National Electrical Manufacturers Association (NEMA), 1300 North

§ 110.10-1

- 17th Street, Rosslyn, VA 22209, 703-841-3200, http://www.nema.org.
- (1) NEMA Standards Publication ICS 2–2000, Industrial Control and Systems Controllers, Contactors, and Overload Relays, Rated 600 Volts, (2000), ("NEMA ICS 2"), IBR approved for §111.70–3.
- (2) NEMA Standards Publication ICS 2.3–1995, Instructions for the Handling, Installation, Operation, and Maintenance of Motor Control Centers Rated not More Than 600 Volts, (1995), ("NEMA ICS 2.3"), IBR approved for §111.70–3.
- (3) NEMA Standards Publication No. ICS 2.4–2003, NEMA and IEC Devices for Motor Service—a Guide for Understanding the Differences, (2003), ("NEMA ICS 2.4"), IBR approved for § 111.70–3.
- (4) NEMA Standards Publication No. ANSI/NEMA 250–1997, Enclosures for Electrical Equipment (1000 Volts Maximum) (Aug. 30, 2001), ("NEMA 250"), IBR approved for §\$110.15–1, 111.01–9, 110.15–1, 113.10–7, 113.20–3, 113.25–11, 113.30–25, 113.37–10, 113.40–10 and 113.50–5
- (5) NEMA Standards Publication No. WC-3-1992, Rubber Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy, Revision 1, February 1994, ("NEMA WC-3"), IBR approved for §111.60-13.
- (6) NEMA WC-70/ICEA S-95-658-1999 Standard for Non-Shielded Power Rated Cable 2000V or Less for the Distribution of Electrical Energy, (1999), ("NEMA WC-70"), IBR approved for §111.60-13.
- (p) National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02169, 617–770–3000, http://www.nfpa.org.
- (2) NFPA 70—National Electrical Code, 2011 Edition ("NFPA 70"), IBR approved for $\S10.15-1(b)$, 111.106-3(b), and 111.106-5(c).

- (3) NFPA 77—Recommended Practice on Static Electricity, 2000 ("NFPA 77"), IBR approved for §111.105–27.
- (4) NFPA 99—Standard for Health Care Facilities, 2005 ("NFPA 99"), IBR approved for §111.105–37.
- (5) NFPA 496—Standard for Purged and Pressurized Enclosures for Electrical Equipment, 2003 ("NFPA 496"), IBR approved for §111.105–7.
- (6) NFPA 496—Standard for Purged and Pressurized Enclosures for Electrical Equipment, 2008 Edition ("NFPA 496 (2008)"), IBR approved for §111.106–3(c).
- (q) Naval Sea Systems Command (NAVSEA), Code 55Z, 1333 Isaac Hull Avenue SE., Washington Navy Yard, Washington, DC 20362, 202–781–0000, http://www.navsea.navy.mil.
- (1) DDS 300-2—A.C. Fault Current Calculations, 1988 ("NAVSEA DDS 300-2"), IBR approved for §111.52-5.
- (2) MIL-HDBK-299(SH)—Military Handbook Cable Comparison Handbook Data Pertaining to Electric Shipboard Cable Notice 1–1991 (Revision of MIL-HDBK-299(SH) (1989)), 1991 ("NAVSEA MIL-HDBK-299(SH)"), IBR approved for § 111.60–3.
- (r) UL (formerly Underwriters Laboratories, Inc.), 12 Laboratory Drive, Research Triangle Park, NC 27709–3995, 919–549–1400, http://www.ul.com.
- (1) UL 44—Standard for Thermoset-Insulated Wire and Cable, Fifteenth Edition, Mar. 22, 1999 (Revisions through and including May 13, 2002), ("UL 44"), IBR approved for §111.60–11.
- (2) UL 50—Standard for Safety Enclosures for Electrical Equipment, Eleventh Edition, Oct. 19, 1995 ("UL 50"), IBR approved for §111.81–1.
- (3) UL 62—Standard for Flexible Cord and Fixture Wire, Sixteenth Edition, Oct. 15, 1997 ("UL 62"), IBR approved for §111.60–13.
- (4) UL 83—Standard for Thermoplastic-Insulated Wires and Cables, Twelfth Edition, Sept. 29, 1998 ("UL 83"), IBR approved for §111.60–11.
- (5) UL 484—Standard for Room Air Conditioners, Seventh Edition, Apr. 27, 1993 (Revisions through and including Sep. 3, 2002) ("UL 484"), IBR approved for §111.87–3.
- (6) UL 489—Molded-Case Circuit Breakers, Molded-Case Switches, and

Circuit-Breaker Enclosures, Ninth Edition, Oct. 31, 1996, (Revisions through and including Mar. 22, 2000), ("UL 489"), IBR approved for §§111.01–15 and 111.54–1.

- (7) UL 514A—Metallic Outlet Boxes, Ninth Edition, (Dec. 27, 1996), ("UL 514A"), IBR approved for §111.81-1.
- (8) UL 514B—Conduit, Tubing, and Cable Fittings, Fourth Edition, (Nov. 3, 1997), ("UL 514B"), IBR approved for §111.81–1.
- (9) UL 514C—Standard for Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers, Second Edition, (Oct. 31, 1988), ("UL 514C"), IBR approved for §111.81–1.
- (10) UL 674—Standard for Safety: Electric Motors and Generators for Use in Division 1 Hazardous (Classified) Locations, Fourth Edition with revisions through August 12, 2008 (dated December 11, 2003) ("ANSI/UL 674"), IBR approved for §111.106–3(b).
- (11) UL 823—Electric Heaters for Use in Hazardous (Classified) Locations, Ninth Edition including revisions through November 15, 2007 (dated October 20, 2006) ("ANSI/UL 823"), IBR approved for §111.106–3(b).
- (12) UL 844—Standard for Safety: Luminaires for Use in Hazardous (Classified) Locations, Twelfth Edition including revisions through November 20, 2008 (dated January 11, 2006) ("ANSI/UL 844"), IBR approved for §111.106–3(b).
- (13) UL 913—Standard for Safety: Intrinsically Safe Apparatus and Associated Apparatus for Use in Class i, ii, and iii, Division 1, Hazardous (Classified) Locations, Sixth Edition, (Aug. 8, 2002) (Revisions through and including Dec. 15, 2003), ("UL 913"), IBR approved for §111.105–11.
- (14) UL 913—Standard for Safety: Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous Locations, Seventh Edition including revisions through June 3, 2010 (dated July 31, 2006) ("ANSI/UL 913"), IBR approved for §111.106–3(b).
- (15) UL 1042—Standard for Electric Baseboard Heating Equipment, Apr. 11, 1994, IBR approved for §111.87–3.
- (16) UL 1072—Standard for Medium-Voltage Power Cables, Third Edition, Dec. 28, 2001 (Revisions through and in-

- cluding Apr. 14, 2003), IBR approved for \$111.60-1.
- (17) UL 1104—Standard for Marine Navigation Lights, Second Edition, Oct. 29, 1998, IBR approved for §111.75–17.
- (18) UL 1203—Standard for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations, Third Edition, Sep. 7, 2000 (Revisions through and including Apr. 30, 2004), IBR approved for §111.105–9.
- (19) UL 1203—Standard for Safety: Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations, Fourth Edition including revisions through October 28, 2009 (dated September 15, 2006) ("ANSI/UL 1203"), IBR approved for §111.106–3(b).
- (20) UL 1309—Marine Shipboard Cables, First Edition, July 14, 1995, IBR approved for §§111.60–1, 111.60–3, and 111.106–5(a).
- (21) UL 1581—Reference Standard for Electrical Wires, Cables, and Flexible Cords, 2003, IBR approved for §§111.30–19, 111.60–2 and 111.60–6.
- (22) UL 1598—Luminaires, First Edition, Jan. 31, 2000, IBR approved for §111.75-20.
- (23) UL 1598A—Standard for Supplemental Requirements for Luminaires for Installation on Marine Vessels, First Edition, Dec. 4, 2000, IBR approved for §111.75–20.
- (24) UL 1604—Electrical Equipment for Use in Class I and II, Division 2 and Class III Hazardous (Classified) Locations, Third Edition including revisions through February 3, 2004 (dated April 28, 1994), IBR approved for §111.106–3(b).
- (25) UL 2225—Cables and Cable-Fittings for Use in Hazardous (Classified) Locations, Second Edition, December 21, 2005 ("ANSI/UL 2225"), IBR approved for §111.106–3(b).

[USCG-2012-0208, 79 FR 48925, Aug. 18, 2014]

Subpart 110.15—Terms Used in This Subchapter

§110.15-1 Definitions.

As used in this subchapter—

(a) The electrical and electronic terms are defined in IEEE 100 or IEC